

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010396**Date Inspected:** 12-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Gou Yan Fei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Crossbeams**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG CROSS BEAM CB1

This crossbeam has been brought back to the dock in order to allow American Bridge / Fluor (ABF) and Caltrans QA inspectors to perform Ultrasonic Testing (UT) on the Complete Joint Penetration (CJP) corner joints using the "D" scanning pattern described in AWS D1.5 figure 6.7. The purpose for this particular testing method is to detect suspected transverse cracking of the CJP corner joints.

OBG CROSS BEAM CB2

This crossbeam has been brought back to the dock in order to allow American Bridge / Fluor (ABF) and Caltrans QA inspectors to perform Ultrasonic Testing (UT) on the Complete Joint Penetration (CJP) corner joints using the "D" scanning pattern described in AWS D1.5 figure 6.7. The purpose for this particular testing method is to detect suspected transverse cracking of the CJP corner joints.

OBG CROSS BEAM CB3

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This crossbeam has been brought back to the dock in order to allow American Bridge / Fluor (ABF) and Caltrans QA inspectors to perform Ultrasonic Testing (UT) on the Complete Joint Penetration (CJP) corner joints using the "D" scanning pattern described in AWS D1.5 figure 6.7. The purpose for this particular testing method is to detect suspected transverse cracking of the CJP corner joints.

OBG CROSS BEAM CB4

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB5

This QA Inspector performed Ultrasonic Testing (UT) using scanning pattern ("D") specified in AWS section 6, figure 6.7. The purpose of this specific testing is verification of transverse planar type indications discovered by ABF UT technicians in the Complete Joint Penetration (CJP) corner joints that have been ground flush. This QA Inspector performed UT on weld joints identified as CB202A-005-005 and CB202A-005-017. Reporting for this UT was made to Caltrans QA ASNT Level III via 'Ultrasonic Transverse Indication Evaluation Sheet'.

This QA inspector discovered one (1) class "A" rejectable Longitudinal Linear Indication in the C202A-005-017 weld which the contractor failed to identify as this weld has been previously tested and accepted by the contractor. The Y location of the Class "A" rejectable Longitudinal Linear Indication is as follows; 3940mm. The Y location was taken from the north end of the crossbeam. This QA generated an incident report concerning this issue.

OBG CROSS BEAM CB8

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB10

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB12

This QA observed ZPMC qualified welding personnel identified as 059459 perform FCAW welding on weld joint identified as CB201G-033-057. This weld is one of forty four welds ZPMC is changing from a fillet to a Complete Joint Penetration (CJP) weld. ZPMC appears to have approval to make these changes per submittal B-JC02R1. ZPMC QC identified as Mr. Guo Yan Fei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2233-Tc-U4c-F.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and AC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (15000422372), who represents the Office of Structural Materials for your project.

Inspected By:	Hall,Steven	Quality Assurance Inspector
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Reviewed By:	Patterson,Rodney	QA Reviewer
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